New Lake K FAQ's

What is selenium?

Selenium is a naturally occurring element present in sedimentary rocks, shales, coal and phosphate deposits and soils. Selenium is a micro nutrient essential for biological process to occur for humans and animals. Although selenium is an essential micro nutrient, at high levels it can be toxic.

Where does selenium come from?

Selenium can be released into the environment through natural processes or through human activities including but not limited to resource extraction.

How did selenium get into Lake Koocanusa?

The source of selenium in Lake Koocanusa can be traced to the steel producing metallurgical coal mines in the Elk Valley, British Columbia. Selenium leaches out of the waste rock and into the Elk River, a tributary of the Kootenai River which forms Lake Koocanusa behind Libby Dam.

How does selenium affect fish and other aquatic life?

Selenium becomes concentrated in the food chain, particularly in lakes, and is known to compromise reproduction in certain species of fish.

Are fish in Lake Koocanusa affected by selenium?

Is it safe to eat fish from Lake Koocanusa?

Yes, fish consumption remains safe in Lake Koocanusa.

Is it safe to swim in Lake Koocanusa?

Yes, it is safe to swim in Lake Koocanusa.

Is it safe to drink water from Lake Koocanusa?

Yes, it is safe to drink the water from Lake Koocanusa.

How has selenium changed over time?

What are Montana DEQ and EPA doing to protect water quality and fish in Lake Koocanusa?

What is a Site-Specific Water Quality Standard?

Site-specific water quality standards are derived using data from the specific water body or region, in this case Lake Koocanusa.

Why is MT using a Site-Specific standard?

US EPA recommends in their 2016 national selenium water quality standard that states adopt site-specific selenium water quality standards whenever possible. MT has a WQS for Se, but because the way that Se bioaccumulates and moves up the food chain is very dependent on site-specific factors, DEQ determined that a site-specific Se criteria was most appropriate, protective and scientifically valid. That scientific process is well on its way to completion.

How will the new criterion affect Lake Koocanusa?

The final site-specific selenium standard will remain protective of all current designated uses of Lake Koocanusa (aquatic life, fish, recreation).

How is the site-specific standard being developed?

Montana DEQ has maintained innovative collaboration with the British Columbia Ministry of the Environment (ENV) to set a single site-specific standard for Lake Koocanusa on both sides of the border. MDEQ and ENV created the Lake Koocanusa Monitoring and Research Working Group, Research and Monitoring Committee, and Selenium Technical Sub Committee comprised of stakeholders and selenium experts to address stakeholder concern and derive a selenium site-specific standard. MDEQ is working the U.S. Geological Survey (USGS) to derive a site-specific standard using Lake Koocanusa data and the USGS developed Ecosystem Scale Model.

What other pollutants are in Lake Koocanusa?

Are selenium and other pollutants affecting the Kootenai River downstream of Libby Dam?

How can I get involved?

DEQ will hold a formal public comment period as part of the rule making process. In addition, MDEQ encourages interested parties to participate in stakeholder working group meetings, participate in informal public comment through public meetings, stakeholder meetings, and the submission of letters and emails to DEQ.

Currently, DEQ and US EPA have two public meetings scheduled November 12 in Libby, MT (Kirby Maki Theater) and November 13 in Eureka, MT (Lincoln County High School Auditorium).

Where can I get more information about this issue?

A public Lake Koocanusa wiki site houses detailed information on the derivation of the selenium site specific criterion including all stakeholder group and technical subcommittee meetings, data collected, monitoring reports and more. This site is located at [HYPERLINK "http://lakekoocanusaconservation.pbworks.com/" \t "_blank"]
Additionally, MDEQ has a Lake Koocanusa website which can be found at [HYPERLINK "http://deq.mt.gov/DEQAdmin/LakeKoocanusa" \t "_blank"]

Where can I find information about the data collected?

All the data that has been collected can be located through the National Water Quality Portal located at [HYPERLINK "https://www.waterqualitydata.us/"]

Additional detailed information can be found at [HYPERLINK "http://lakekoocanusaconservation.pbworks.com/" \t "_blank"]

Who are the agency point of contacts?

Include a table?